

Iowa's Evolving Drug Trends & Public Safety Implications

January 2020 Iowa Office of Drug Control Policy

Emerging Drug Issues: Overview

PRODUCT DIFFUSION

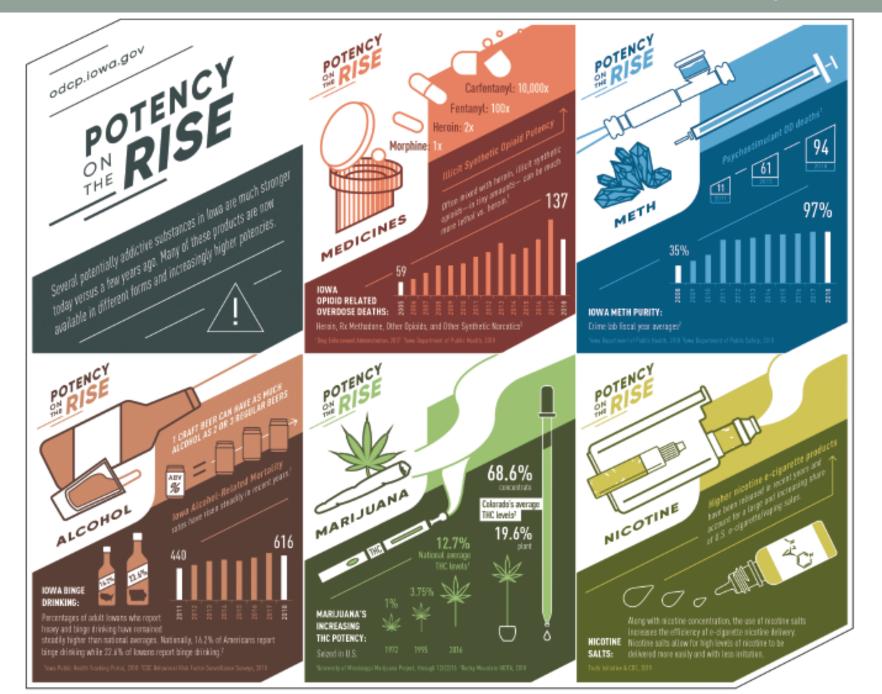
- -Delivery/Consumption Systems: Vaping (Nicotine, THC, Heroin, etc.), smoking, oral ingestion, IV
- -Forms: THC & CBD oils, waxes, edibles; Smokable hemp; Synthetics; "Ice"
- -Mixtures: Heroin + Fentanyl &/or Meth &/or Marijuana; Other cocktails
- -Distribution: Mail & Shipping Services

POTENCY ESCALATION

- -Alcohol: Concentrations (craft beers)
- -Nicotine: Levels (vaping pods)
- -THC: Concentrations (hash oils, waxes & edibles)
- -Meth: Purities (nearly 100% "ice")
- -Fentanyl, et al.: Extremely lethal

POLICY CHANGE

-LAWS: Medical & legal marijuana (THC &/or CBD); Hemp; Psychedelic Mushrooms (psilocybin) & Ecstasy (MDMA); Opioids; Smoking & Vaping; etc.?



Rates of U.S. Illicit Drug Use, by States & DC

Map: 12+ Current (Past Month) Use

lowa ranks:

41st in overall illicit drug use (9.39% vs. 11.43% US),

47th in marijuana use (7.04% vs. 9.83% US),

37th in heroin use (yearly) (0.26% vs. 0.31% US),

17th in pain reliever misuse (yearly) (4.13% vs. 3.85% US),

46th in the rate of drug overdoses (11.5 vs. 21.7 US per 100,000),

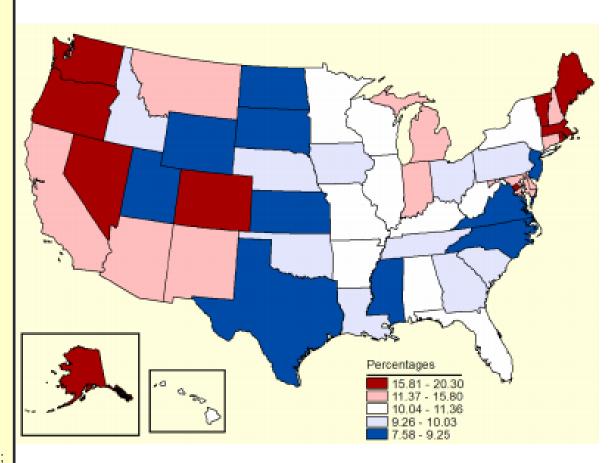
17th in tobacco use (25.51% vs. 21.96% US),

10th in binge alcohol drinking (28.53% vs. 24.49% US),

19th in meth use (yearly) (0.86% vs. 0.64% US),

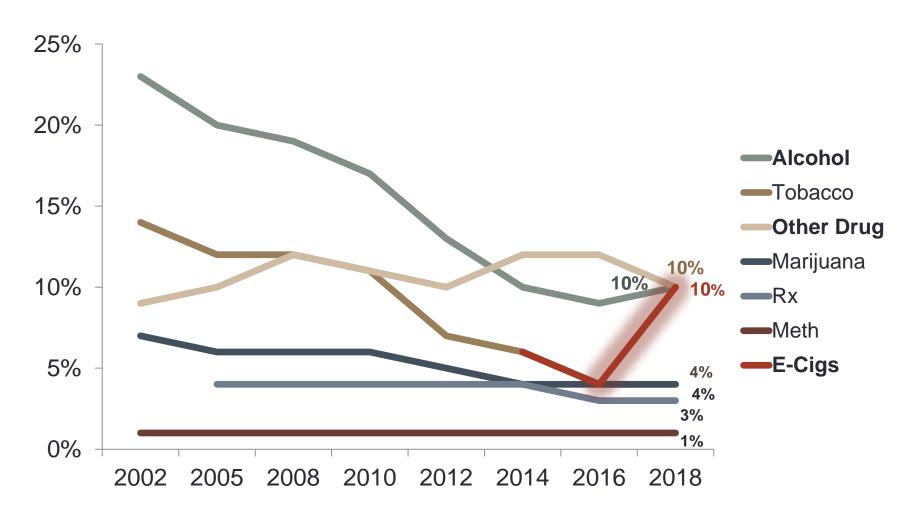
(8th highest rate of meth treatment).

National Survey on Drug Use & Health, 2017-2018; CDC, 2017; & Treatment Episode Data Set, 2017



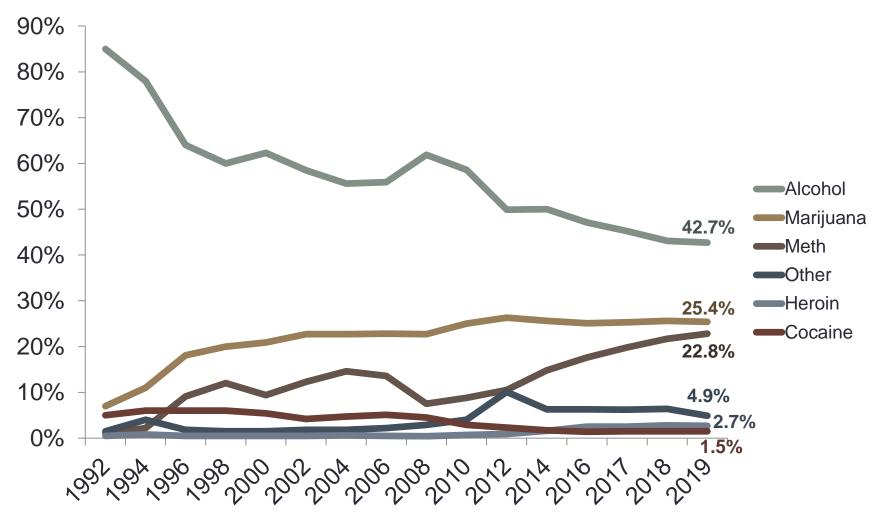
Iowa Youth Substance Abuse

6th, 8th and 11th Grade Users, Last 30-Days



Iowans' Most Common Drugs of Abuse

Primary Substance Cited by Iowans in Treatment



YOUR QUESTION, YOUR ANSWER

Live TV U.S. Edition +

healthline.



Drugged driving deaths up in Iowa after nearby states legalize marijuana



Drug-related crashes up in lowa, while the number of alcohol-related crashes fall

SPORTS

Drugged Driving Deaths Spike With Spread of Legal Marijuana, Opioid Abuse Whealth - Food | Rivers | Weeklers | Reporting | Live Long



'Drugged driving' surpasses drunken driving among drivers killed in crashes, report finds

Drugged driving on the rise as marijuana, opioid use puts motorists at risk, study finds

NEWSLETTER

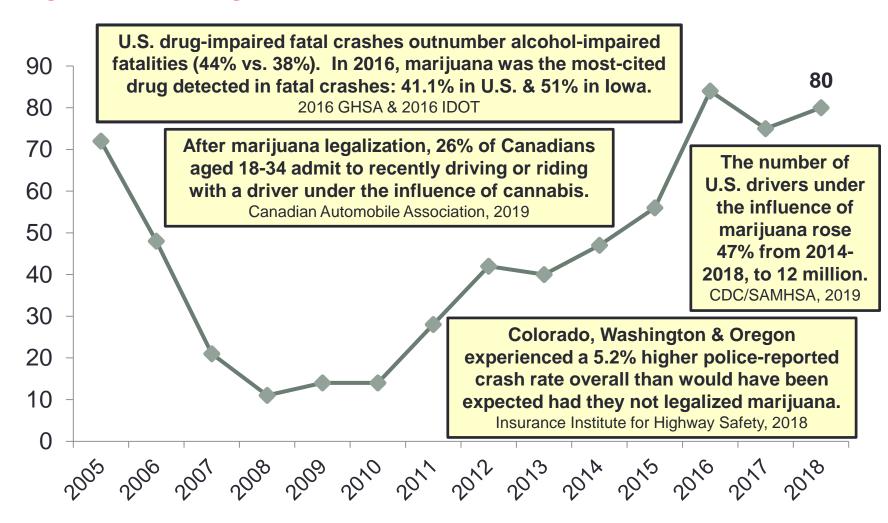




Police in Colorado and California are using tests to see if drivers are high on marijuana. But more exact testing is needed as more states legalize the drug.

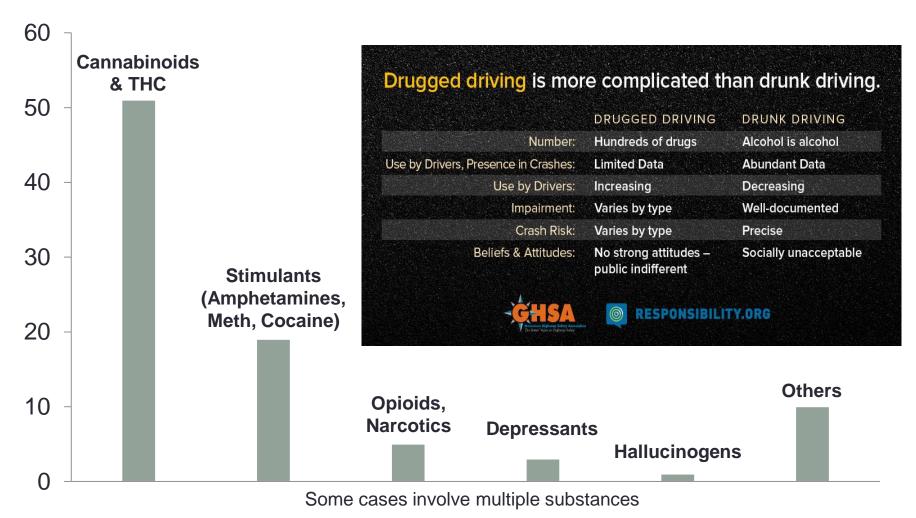
Iowa Drug-Related Traffic Fatalities

Drug & Mixed Drug/Alcohol-Related Traffic Deaths



Iowa Drug-Related Traffic Fatalities

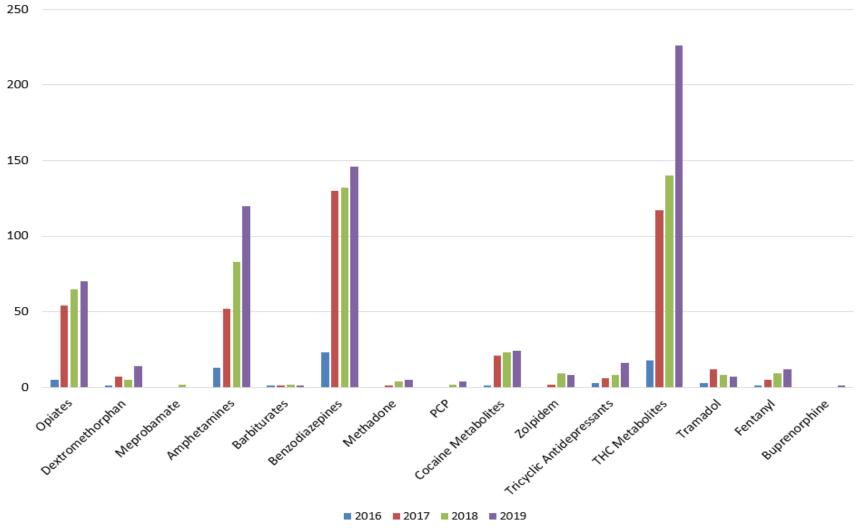
2018 by Drug Type (not including alcohol-only)



Iowa Driving-Related Blood Screens

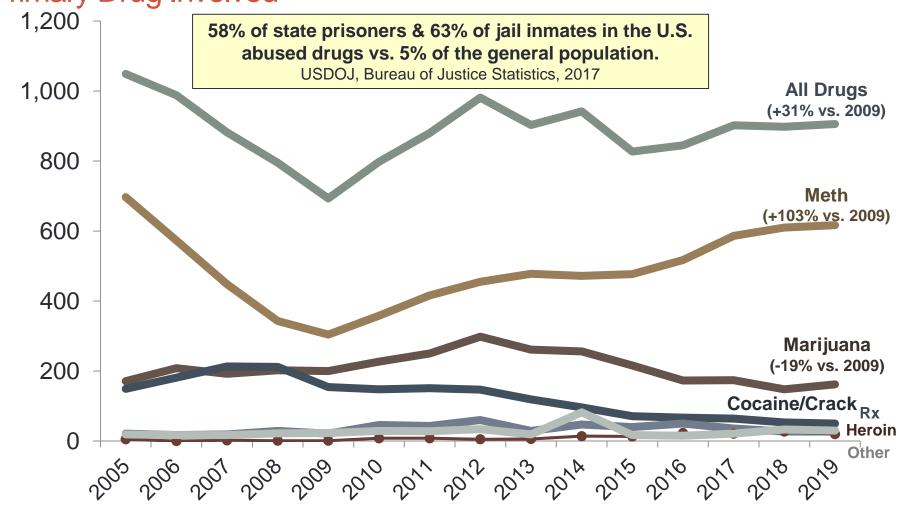
DCI Lab Positive Results on Cases from Law Enforcement

Blood Positive Screens by Drug Category



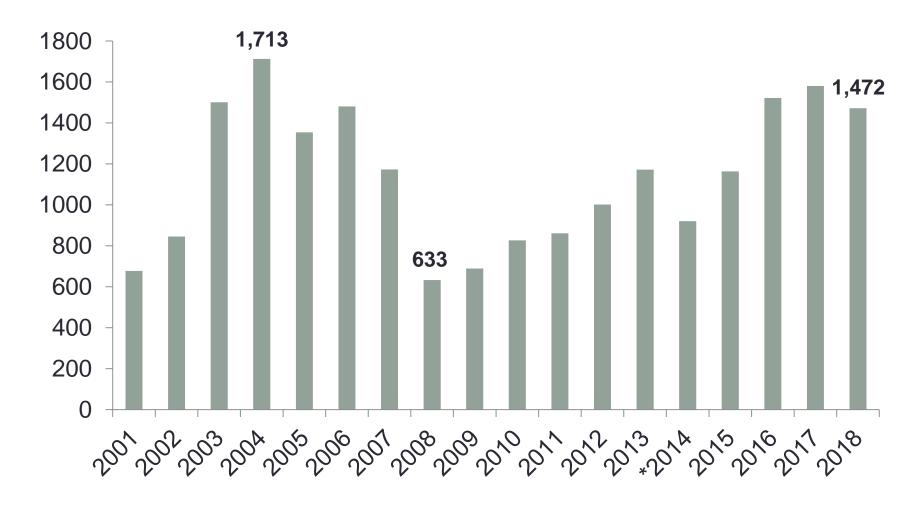
Iowa "Drug-Related" Prison Admissions

Primary Drug Involved



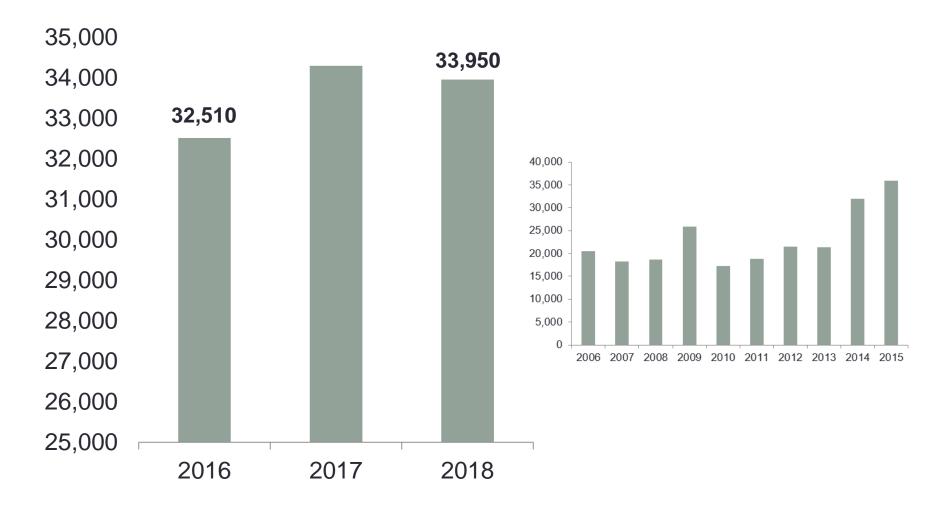
Iowa Drug-Related Child Abuse

Confirmed/Founded Cases: Presence of Illegal Drugs in Child's System



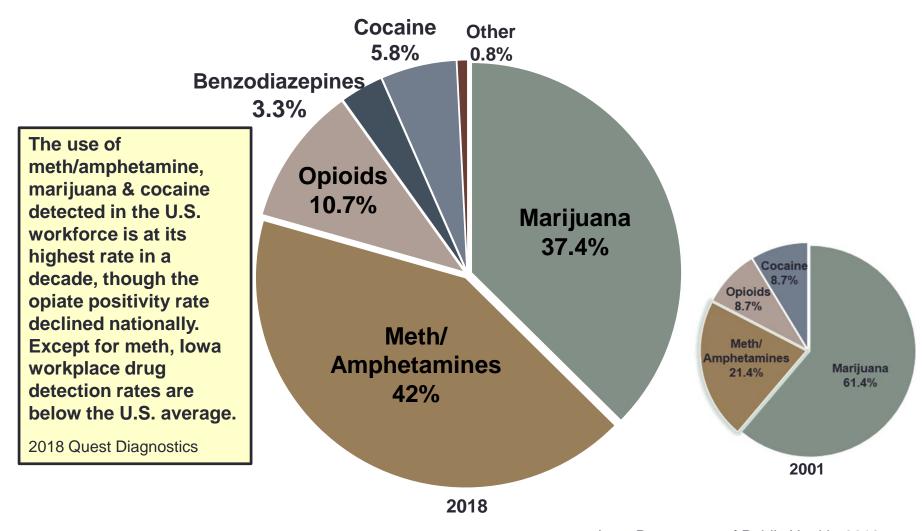
Iowa Drug & Alcohol-Related ED Visits

Use as Causal or Contributing Factor



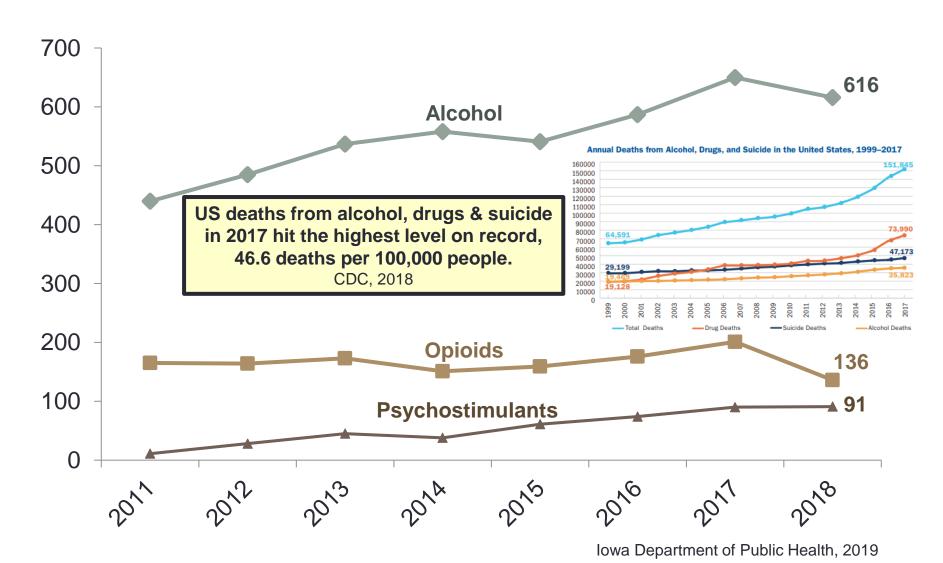
Iowa's Workplace

Small Sample of Positive Drug Tests Reported 2018 vs. 2001 (% of Total)



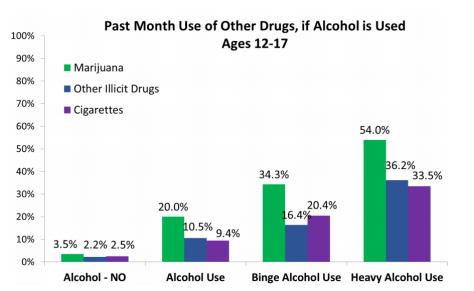
Substance-Involved Deaths in Iowa

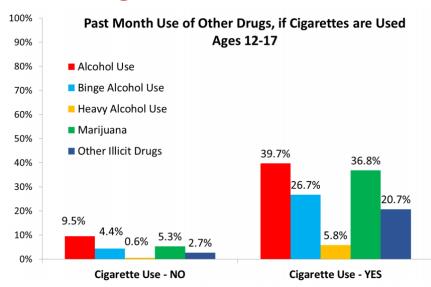
Involving Alcohol, Opioids and Psychostimulants (e.g., Meth)

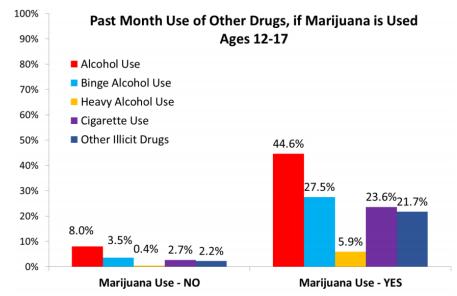


Substance Use Disorder Precursors

Most SUDs are Rooted in Behavior that Begins in our Teens







Alcohol & Tobacco/Nicotine



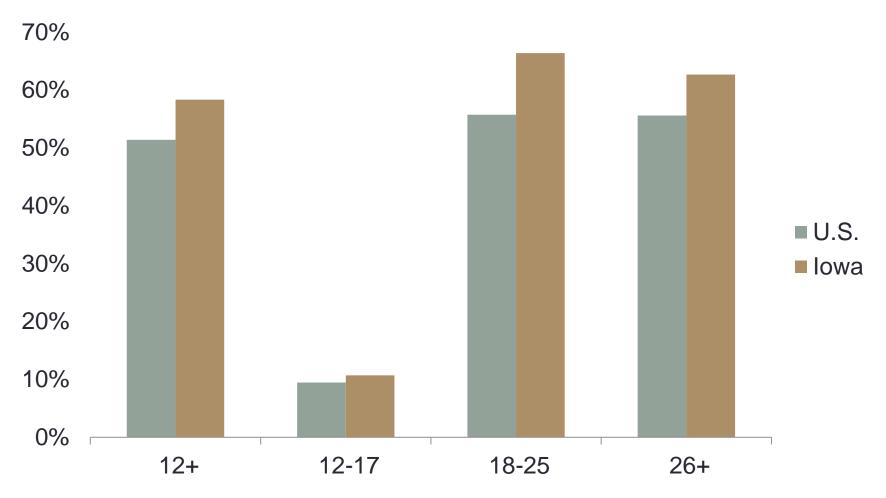






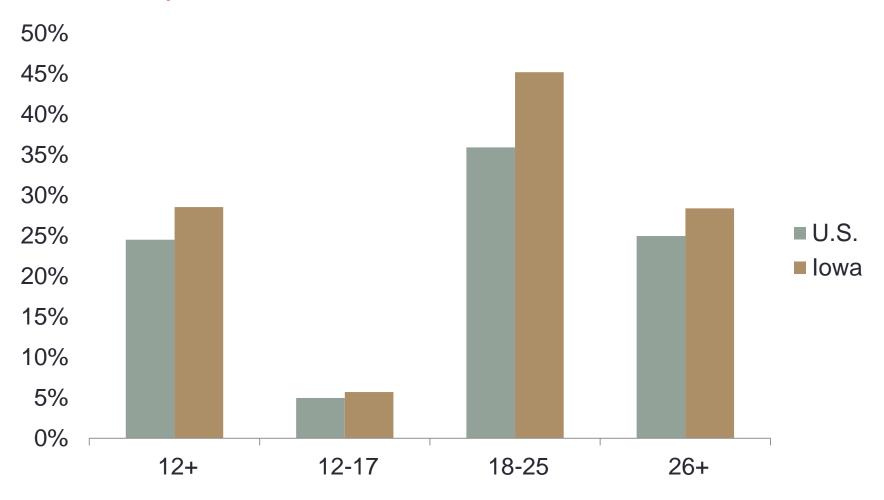
Current Alcohol Use

Last 30-Days



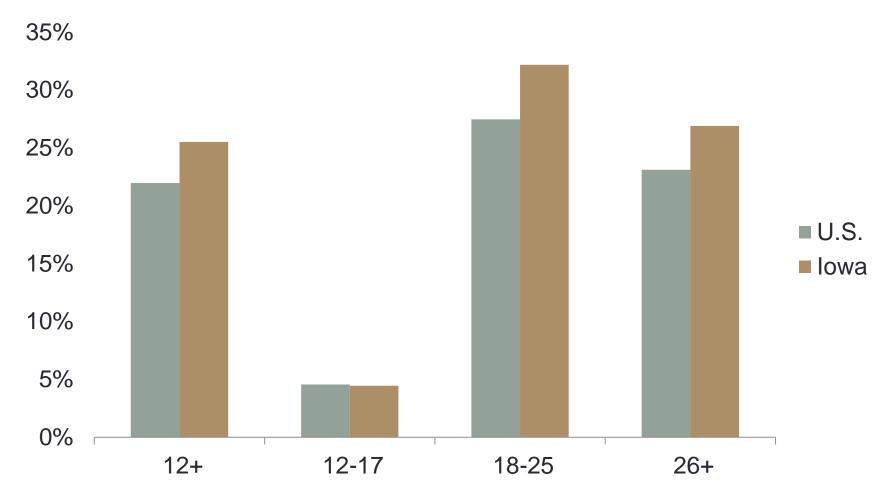
Current Binge Drinking

Last 30-Days



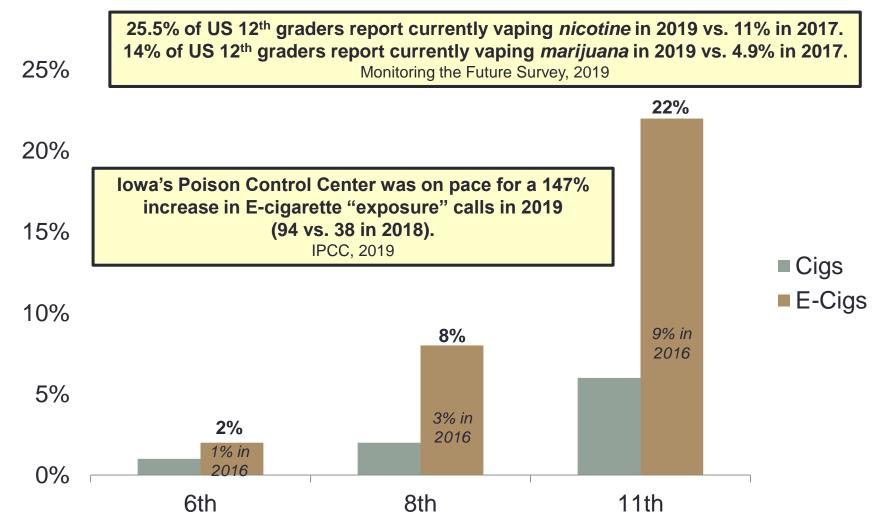
Current Tobacco Product Use

Last 30-Days



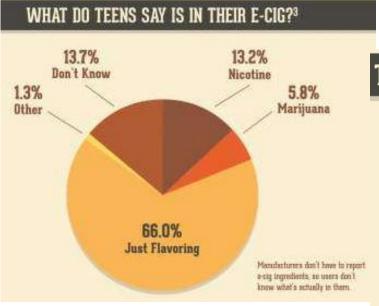
Iowa Youth Cigarette vs. E-Cigarette Use

Last 30-Days



Electronic Smoking by Youth

Nicotine & THC





Vaping-Related Lung Injuries Caused by Chemical Exposure, Study Finds

TEEN E-CIG USERS ARE MORE LIKELY TO START SMOKING.



*Includes combustible tobacco products [cigarettes, cigars, and hookahs]

NON USER

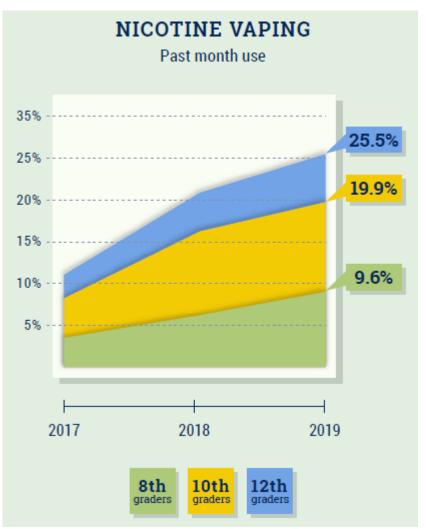
E-CIG USER

Source of vaping products containing THC among those in the U.S. contracting vaping-related lung injuries in 2019:

- 78%: informal (family, friends, dealers & online),
- 16%: commercial (recreational &/or medical marijuana dispensaries),
- 6%: both informal & commercial sources.

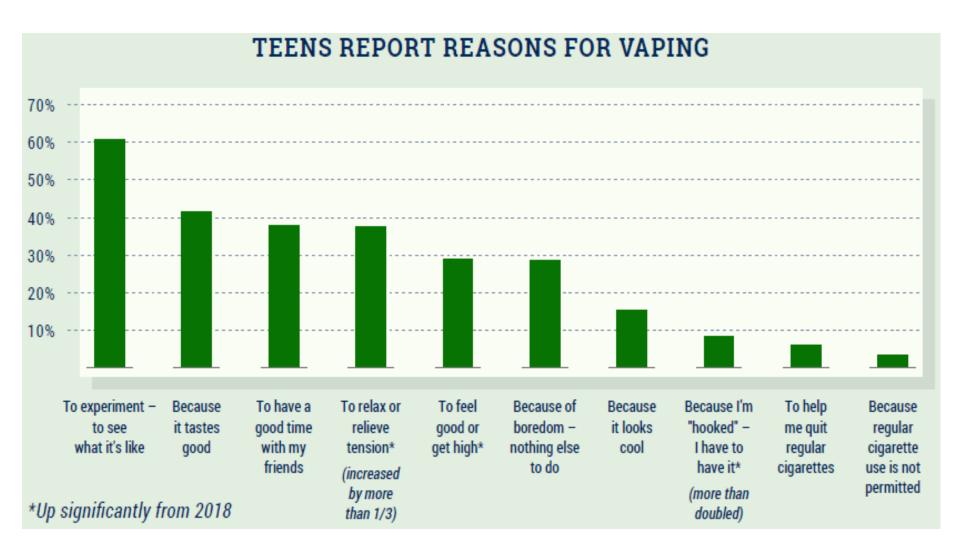
CDC, 2020

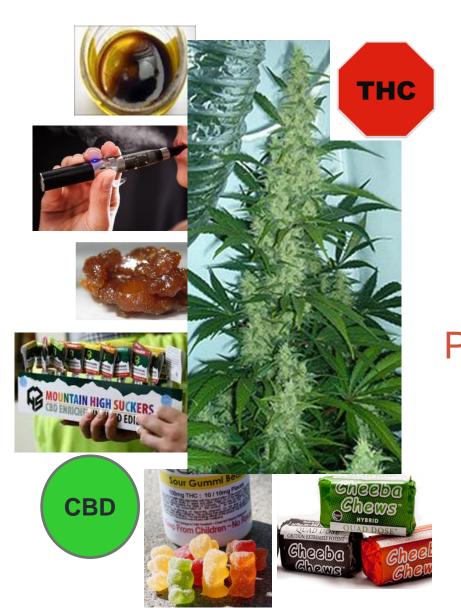
Teen Vaping of Nicotine & Marijuana Surges





Why do Teens Vape?





Marijuana Potential to Heal or Hurt?

"Medical"

"Extracts" "CBD & THC" "Concentrates"

"Recreational"

Language Matters

Marijuana or Cannabis Plant:

Dried leaves, flowers, stems & seeds from the plant, Cannabis sativa.

Concentrates:

High THC marijuana products (e.g., hash oils, waxes & edibles).

Cannabinoids:

Chemical compounds found in marijuana. Scientists say marijuana consists of more than 100 cannabinoids (& over 500 chemicals in total).

Cannabinoid Receptors:

Brain neuron molecules to which cannabinoids attach, disrupting mental & physical functions (memory, coordination, concentration, etc.).

Cannabidiol (CBD):

A non-psychoactive marijuana compound that may have medical value.

Delta-9-tetrahyrdocannabinol (THC):

Marijuana's main psychoactive compound that may have therapeutic value.

Language Changes

Then

- Weed
- Grass
- Pot
- Reefer
- Hash
- Hemp
- Joints
- Blunts
- Buds

Now

- Hash or Honey Oil
- Wax or Earwax
- Budder, Crumble, Shatter
- Black Glass
- Edibles
- Reggie
- Loud
- Tree
- Green

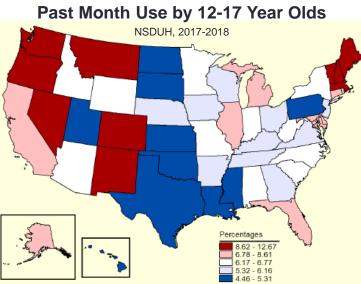
Marijuana Laws & Use by Teens

11 Legal Recreational Marijuana States & DC 33 Legal Medical Marijuana States & DC



- CBD Only Medicinal Use = 14 States (e.g., Iowa)
- No Legal Use = 3 States

*Marijuana remains an illegal Schedule I controlled substance under federal law.



Health Group Positions on Marijuana

Major public health organizations do not support smoked marijuana.











 The American Academy of Pediatrics "opposes medical marijuana outside the regulatory process of the US FDA. Notwithstanding this opposition to use, the AAP recognizes that marijuana may currently be an option for cannabinoid administration for children with life-limiting or severely debilitating conditions and for whom current therapies are inadequate."

Marijuana impairs/worsens respiratory systems, heart rate, coordination, judgment, memory, problem-solving & mood. It contributes to auto crashes & can cause severe anxiety & psychosis.

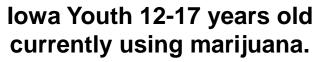
National Institute of Drug Abuse, 2018

Between 9 & 30% of those who use may develop some degree of marijuana use disorder. People who begin using before age 18 are 4 to 7 times more likely than adults to develop a disorder.

National Institute of Drug Abuse, 2018

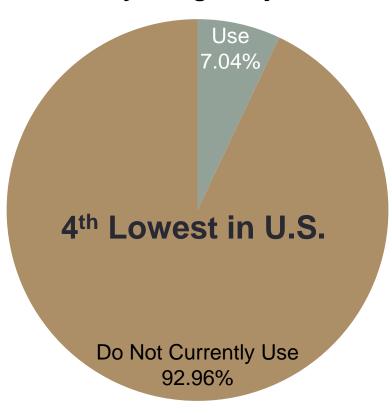
Iowans' Current Marijuana Use

Most Iowans are NOT *current* marijuana users (past 30 days)





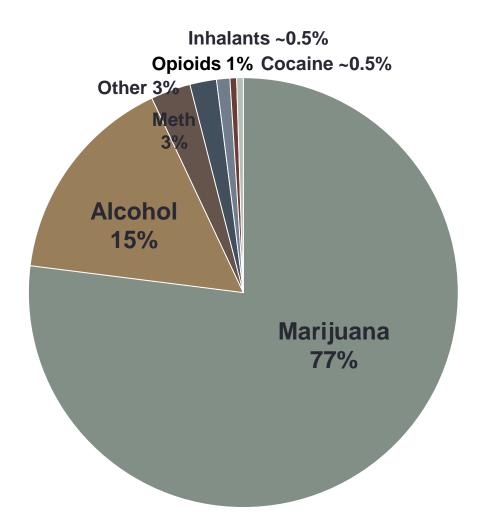
lowans 12 & older currently using marijuana.



(Marijuana is primary drug for 77% of Iowa juveniles in treatment.) Iowa Department of Public Health, 2018

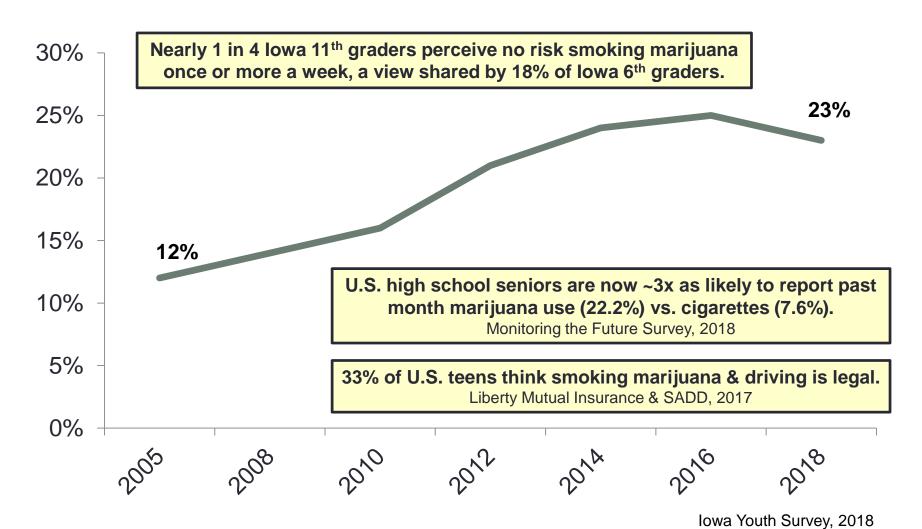
Drugs of Choice: Iowa Youth

Primary Substance for Juveniles in Treatment



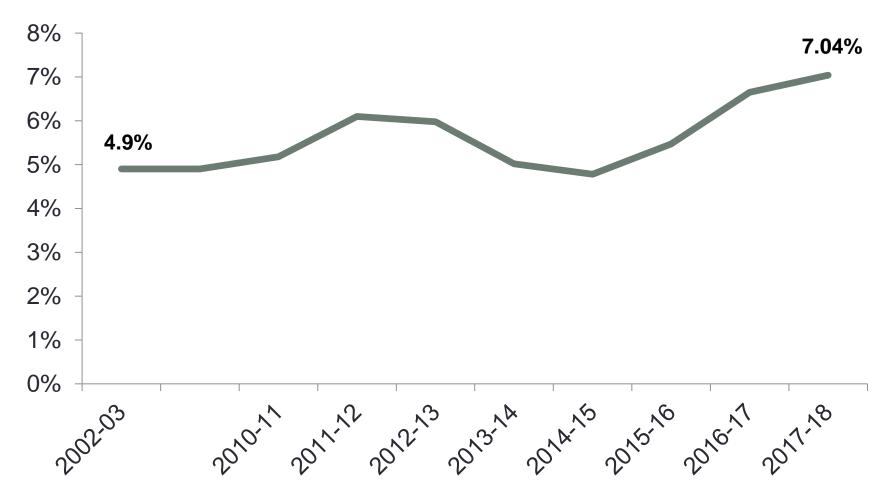
Iowa Youth Attitudes about Marijuana

Lower Perceived Risk Coincides with Higher U.S. Rates of Use



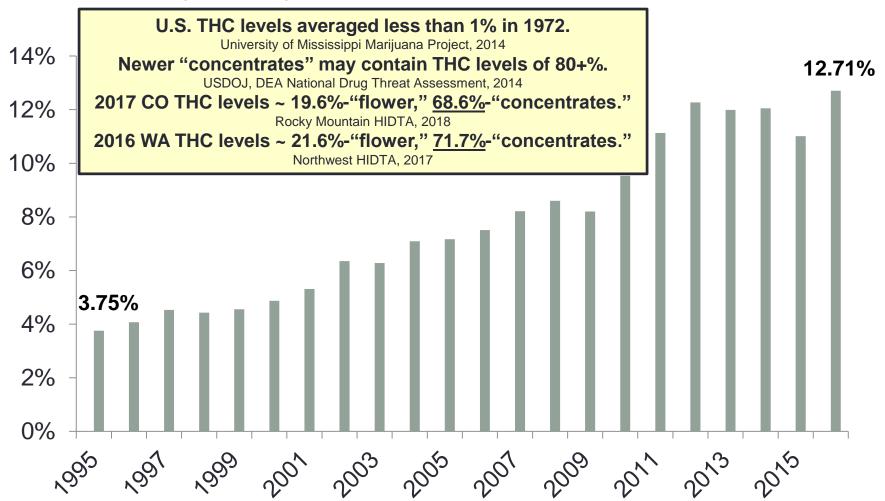
Iowa Marijuana Use

Current Use (Past Month) by Iowans 12+



Marijuana's Increasing THC Potency

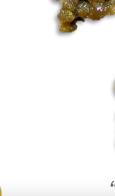
Plant Material ("Weed") Seized in U.S.



Concentrates Less is More...THC



"Green Crack" wax



"Ear Wax"



(BHO)

"Diamonds"



Hash Oil

Capsules

"Budder"

"Shatter"

Register

HOME

NEWS

WS SPO

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USA TOD

JOB

OBS ARC

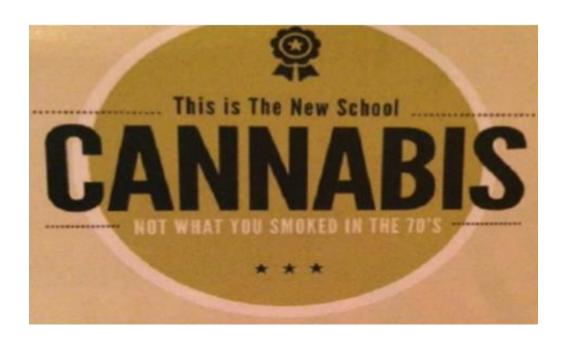
MORE ✓

Des Moines area man arrested in Nebraska with hundreds of vape cartridges filled with THC oil

Concentrates

Less is More...THC

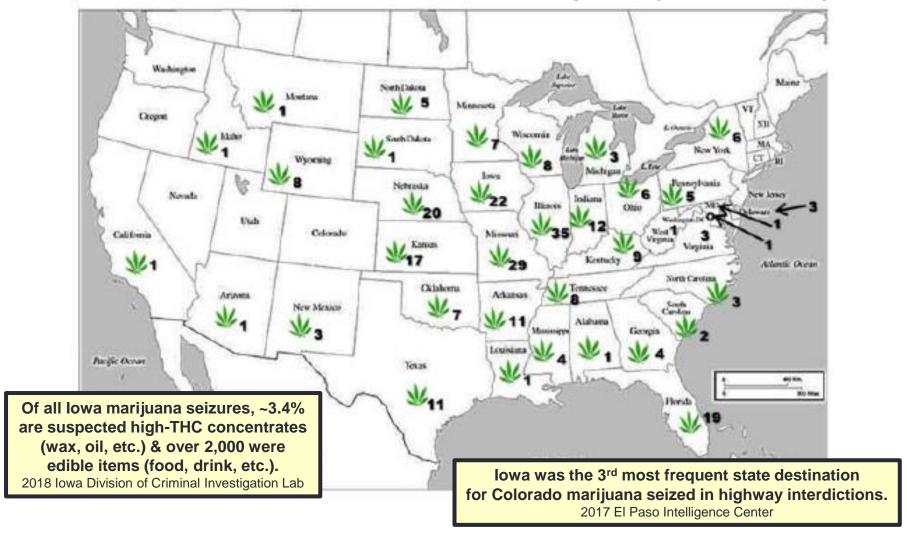






Marijuana from Colorado to Other States

2017 State Destinations for Colorado Marijuana (WA to IA too)



"Medical" Marijuana Derivatives & Extracts

Marinol, Syndros (Dronabinol) & Cesamet (Nabilone):

FDA-approved synthetic cannabinoids—containing THC & CBD—legally available as prescription pills to treat cancer chemotherapy nausea & appetite loss.



Sativex (mouth spray):

A product with 2 cannabinoids extracted from the cannabis plant failed FDA-authorized tests for cancer pain, but is being tested for spasticity & other treatments.



Epidiolex (oral liquid):

Contains the non-psychoactive cannabis extract Cannabidiol (CBD). Recently approved by the FDA & reclassified as a Schedule V controlled substance by the DEA after clinical trials, this Rx product is now available in pharmacies.

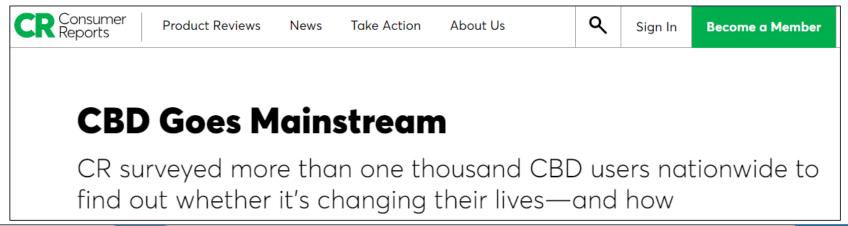


Iowa "Medical Cannabidiol" (mCBD):

State law authorizes products regulated by the Iowa Department of Public Health to be used by qualified patients for eligible conditions.



"Other" CBD (Hemp-Based, Non-Medical)





CBD hype: Is this hemp-plant derivative snake oil or a legit remedy?



Quantitative Lab Testing?

Advisories on other (OTC) CBD Products



- "The FDA has approved only one CBD product, a prescription drug product to treat two rare, severe forms of epilepsy.
- It is currently illegal to market CBD by adding it to a food or labeling it as a dietary supplement.
- The FDA has seen only limited data about CBD safety and these data point to real risks that need to be considered before taking CBD for any reason.
- Some CBD products are being marketed with unproven medical claims and are of unknown quality."

 FDA-November 2019

"When the lowa Hemp Act becomes fully implemented and effective, these products will remain illegal under the newly enacted lowa Code Section 204.7(9) and under lowa Code Chapter 126, the lowa Drug, Device, and Cosmetic Act.."







Iowa Attorney General-July 2019



Medical Marijuana Opioid Misuse



Interpret with CAUTION!

Despite cautions against corollary conclusions from a study that found states with medical marijuana laws from 1999-2010 experienced a **slower increase in opioid OD deaths (-21%)**, medical marijuana was touted as an opioid epidemic solution.

A new study, using the same methods to extend the original analysis through 2017 & include more medical marijuana states, finds an **increase in opioid OD deaths (+23%)**.

According to the lead author, "We don't think cannabis was saving lives...10 years ago, & we don't think it's killing people now." Researchers urge caution & more study.

Other Recent Marijuana Studies

With Health or Public Safety Implications

The number of Americans who admit driving under the influence of marijuana increased 47% from 2014 to 2018. CDC/SAMHSA, 2019

14% of U.S. 12th graders report vaping marijuana in the last month during 2019, up from 4.9% in 2017. Monitoring the Future Survey, 2019

The odds of psychotic disorder among daily cannabis users were 3-2 times higher than for never users, whereas odds among high-potency cannabis users were 1-6 times higher than never users.

The Lancet Psychiatry/Di Forti, et al., 2019

Young adults who are heavy marijuana users are more likely to seek medical marijuana cards. 19% of those studied received a card within a year, even though physical & mental health problems were not significant predictors. Journal of Studies on Alcohol & Drugs/RAND, 2019

Meth

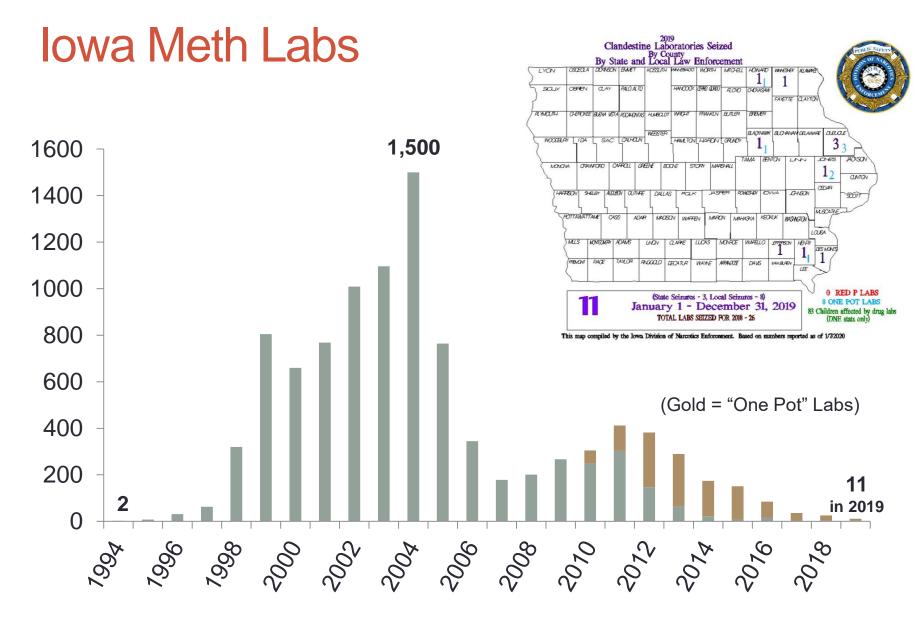




Number of new heroin users drops dramatically, but meth, marijuana use up, survey says

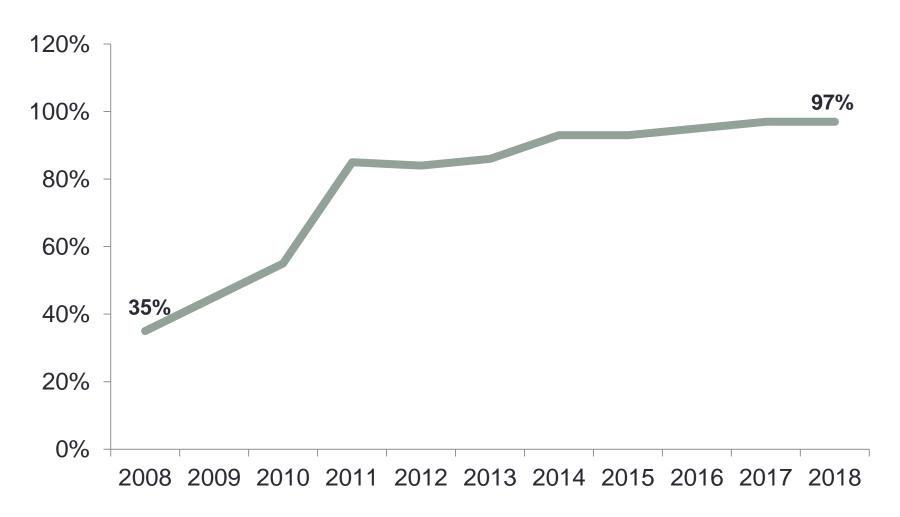
Jayne O'Donnell and Terry DeMio, USA TODAY NETWORK Published 10:37 a.m. ET Sept. 14, 2018 | Updated 6:44 a.m. ET Sept. 15, 2018



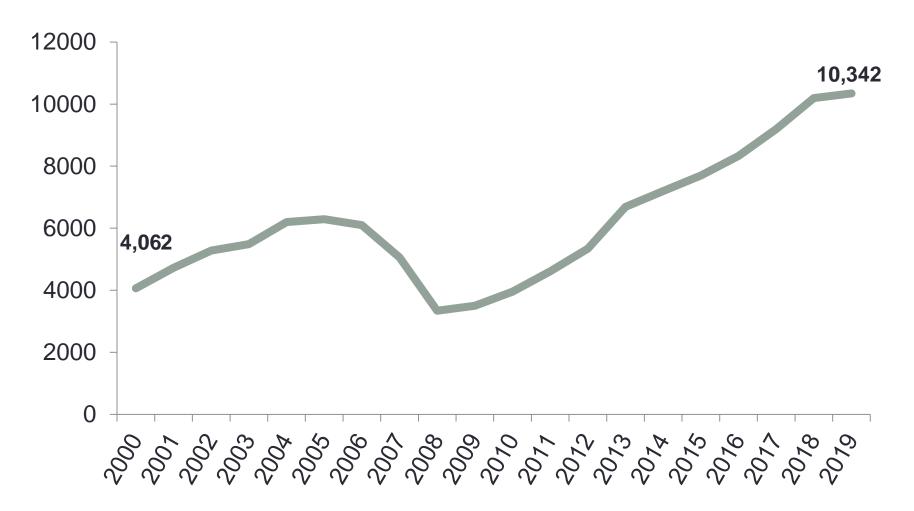


Iowa Meth Purity

Crime Lab Fiscal Year Averages

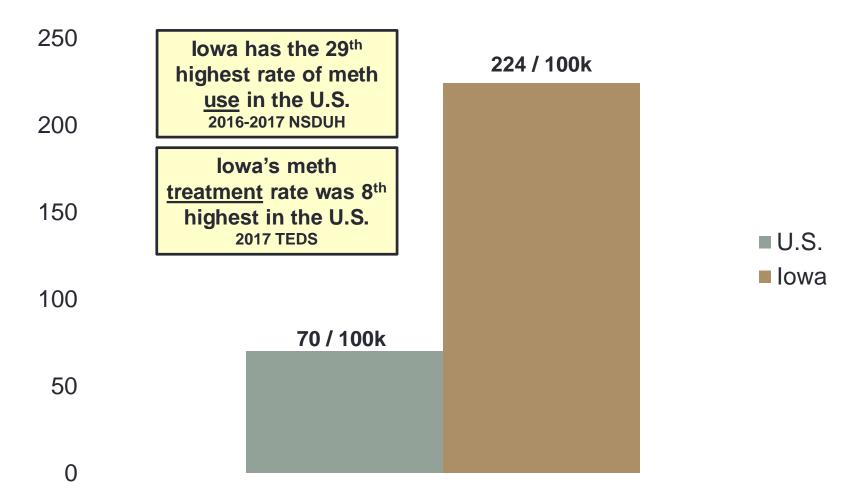


Iowa Meth Treatment Admissions

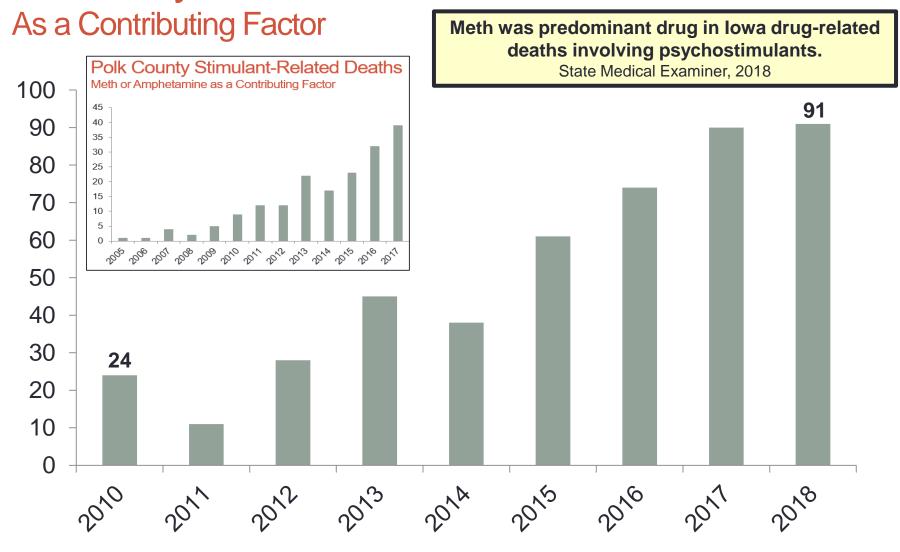


Rate of Primary Meth Treatment

12+ Substance Use Disorder Treatment Admissions for Meth



Iowa Psychostimulant-Related Deaths



Alert: Meth Conversion Labs



Identifying a Methamphetamine Conversion Laboratory
September 17th, 2018
Midwest HIDTA Bulletin #2 – 2018

Drug traffickers have been identified as utilizing meth in solution as a concealment method to transport the drug from the Southwest Border to market areas around the U.S. Meth in solution is not an end-user product; the solution must be converted into usable form, crystal meth, following transport. **Meth conversion labs** typically utilize highly flammable materials and a heat source to convert the meth in solution into crystal meth, presenting a significant risk to law enforcement and other members of the community who may come into contact with these labs.

Crystal Meth Suspended in Liquid



Opioids

- Rx
- Heroin
- Illicit Synthetics (fentanyl analogs, etc.)



Opioid Misuse: Top Line Trends in U.S.

The U.S. has <5% of the world's population, but consumes ~75% of its Rx, including 81% of its oxycodone & >99% of its hydrocodone.

About 3 out of 4 new heroin users report previous Rx opioid misuse.

CDC 2018

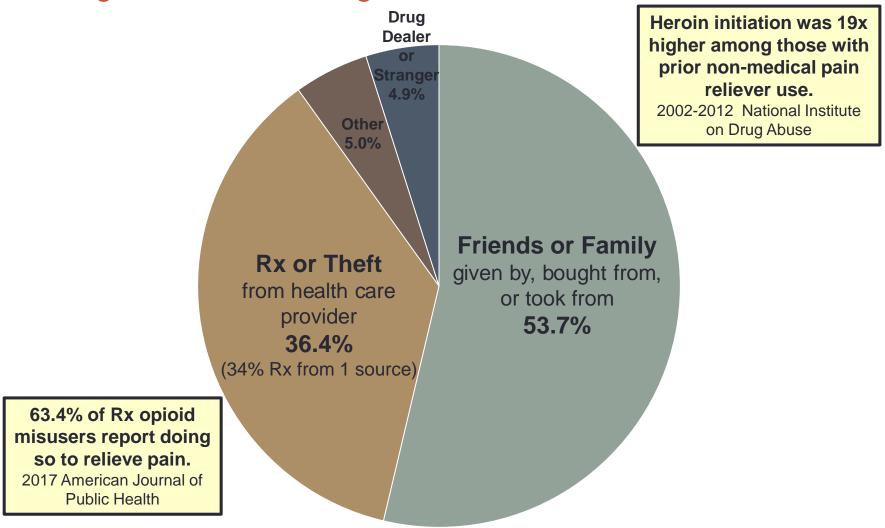
Drug ODs claimed 70,237 U.S. lives in 2017, 192 daily ...68% or 130 from opioids. Over 700,000 Americans have died from drug ODs since 1999.

Surging synthetic opioids (e.g., fentanyl/analogs) are now the leading cause of opioid OD deaths in the U.S., followed by heroin & Rx.

CDC 2017

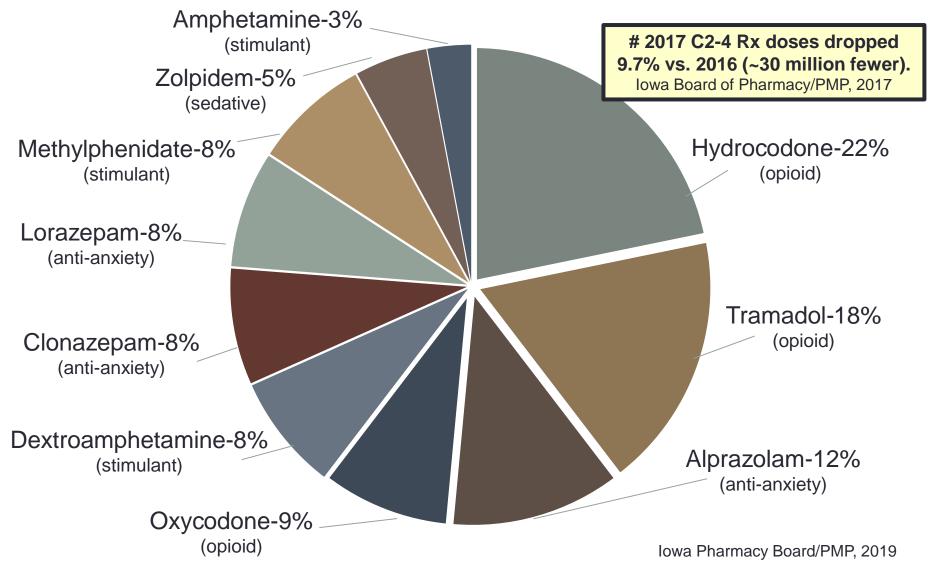
Sources of Opioids being Misused in U.S.

Among those 12+ Misusing Rx Pain Relievers in the Past Year



Top 10 Iowa Rx Controlled Substances

CIIs-CIVs per Iowa's Prescription Monitoring Program (PMP) in 2018

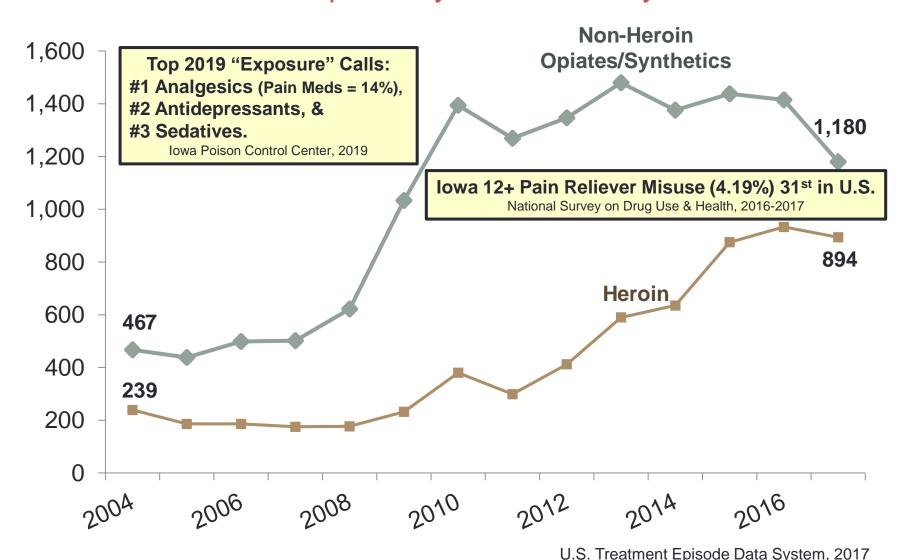


Ease of Access & Perception of Safety



Iowa Opioid Treatment Admissions

Heroin + Non-Heroin Opiates/Synthetics Primary at Admission

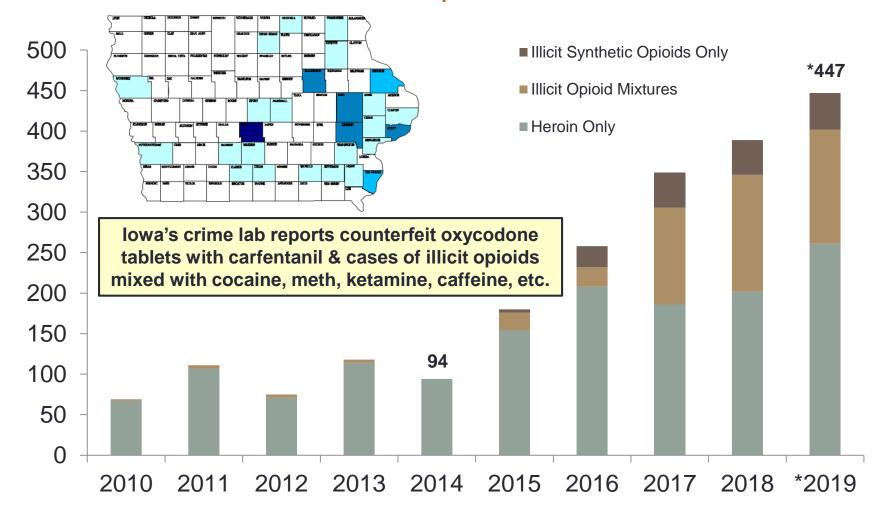


Illicit Synthetic Opioids: Less is More



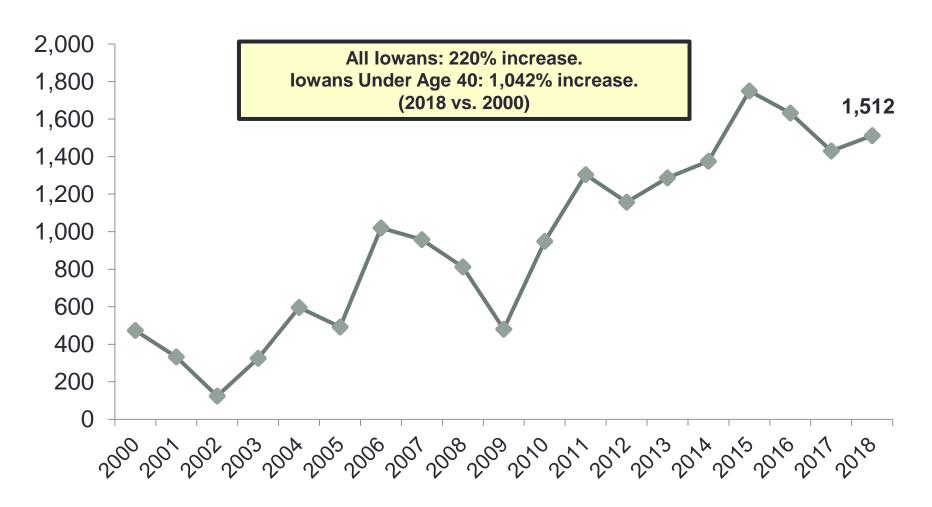
Heroin, Fentanyl & Illicit Synthetic Opioids

Law Enforcement Seizure Cases per Iowa's Crime Lab



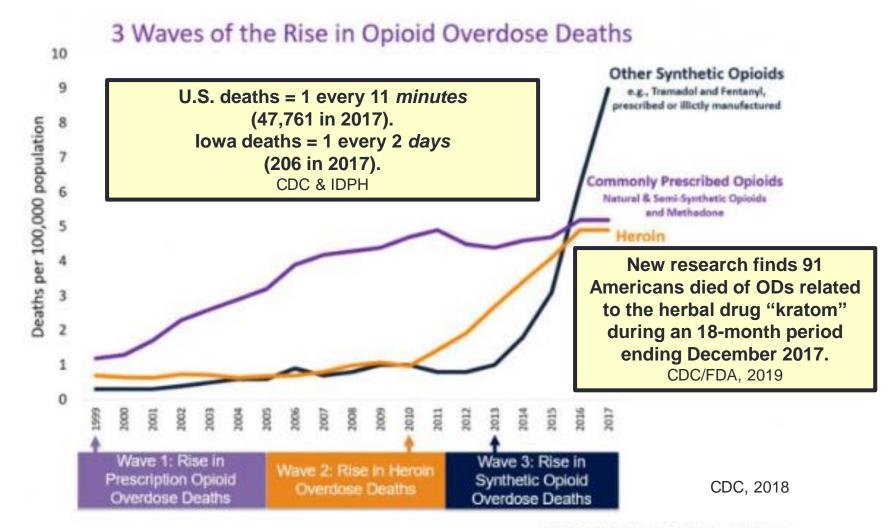
Iowans with Chronic HCV (Hepatitis C)

Confirmed Diagnoses possibly due to IV Drug Use, etc.



Opioid OD Deaths: 1999-2016

By Type of Opioid (Rx, Heroin, Fentanyl, etc.)



Kratom: Drug of Concern?

What is kratom?

A tropical tree native to Southeast Asia. Consumption of leaves produces both stimulant effects (low doses) & sedative effects (high doses), & can lead to psychological & physiological dependence.

How is it used?

Kratom leaves typically are crushed & smoked, brewed into tea, or placed into gel capsules or tablets. Leaves may be dried or powdered, & chewed.

What are the effects?

Low doses: Stimulant effects such as increased alertness, physical energy & talkativeness.

High doses: Sedative effects that can lead to addiction.

Several cases of psychosis have been reported, including delusion, confusion & hallucinations. Effects on the body include nausea, itching, sweating, dry mouth, constipation, increased urination, tachycardia, vomiting, drowsiness, loss of appetite, etc.

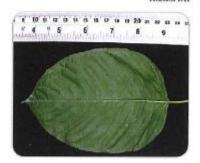
*At least 1 kratom-related lowa OD death has been reported, in 2017.

Legal status?

Currently unregulated federally, though some states have imposed regulations or prohibitions on kratom possession & use. The FDA & DEA have listed kratom as a "drug & chemical of concern."



Knatosa tee



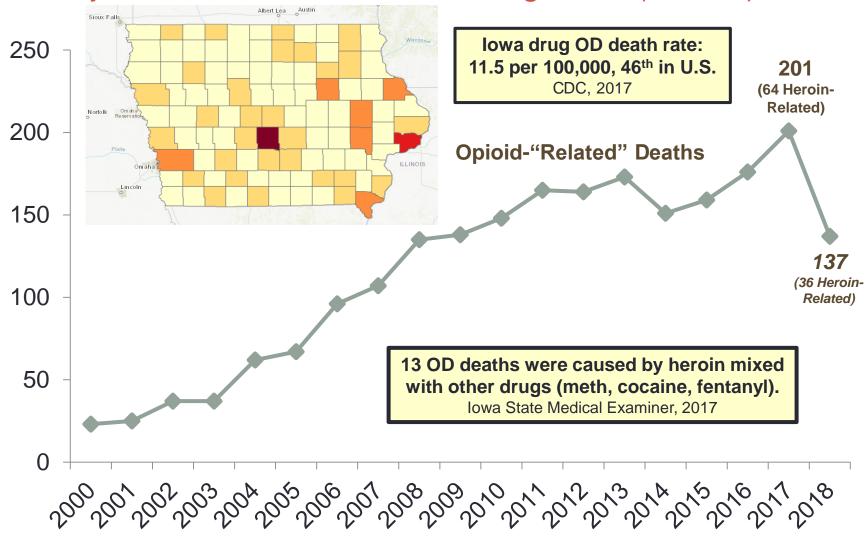
Leaf of knatom tree



Eratom capsule

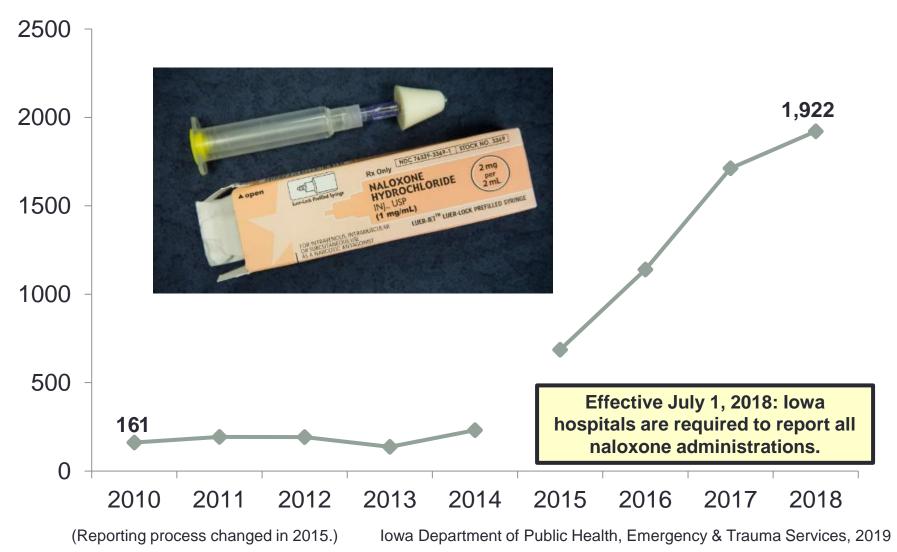
Iowa Opioid OD Deaths

Primary Cause of Deaths vs. Contributing Factor (Related) Deaths



Iowa Opioid OD-Related Naloxone Use

Annual Cases of Administration by Iowa EMS Providers



Iowa Medication Assisted Treatment

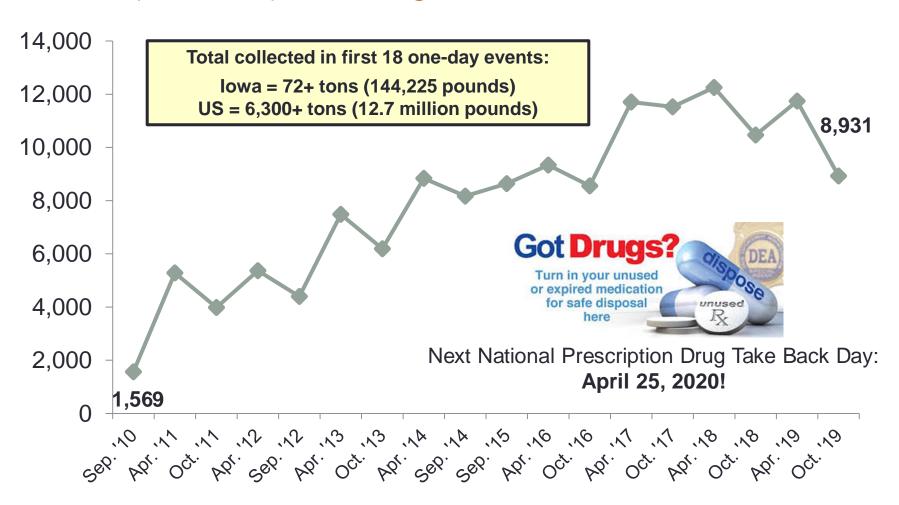
Provider Locations



107 Iowa MAT Providers in 2018 vs. 31 in 2015

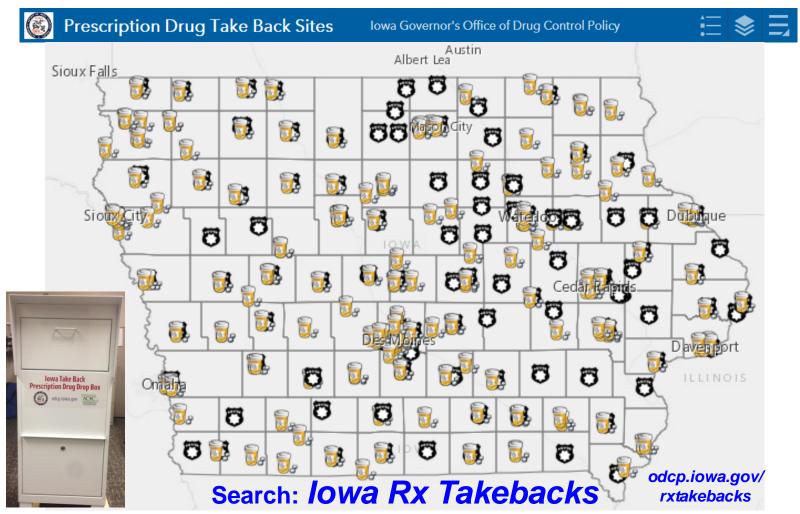
Iowa "Take-Back" Initiative

Amount (in Pounds) of Rx Drugs Collected



Iowa Permanent Rx "Take Back" Sites

Controlled Prescription Drug Disposal Locations



306 Sites Statewide (189 Pharmacies & 117 Law Enforcement Centers) vs. 47 in January 2016

Iowa Drug-Related Legislation

2019: Enacted

- Children's' Mental Health Services Reform (HF 690)
- Medicaid Preauthorization Waiver-Medication Assisted Treatments (HF 623)
- Medicaid Temporary Suspension for Iowans in Public Institutions (HF 423)
- Hemp Legalization (SF 599)

2019: Vetoed

Medical CBD Expansion (HF 732)

2019: Did Not Pass

- Needle Exchange Pilot Program (SF 500 / HF 580)
- Controlled Substance Schedule & PMP Enhancements (SF 572 / HF 728)
- Raise Legal Age for Tobacco Product Use (SF 607)
- Alcohol Poisoning 911 Good Samaritan Immunity (SF 342)
- Marijuana Possession Reduced Penalty for Small Amounts (SF 378)
- Legal Marijuana (SF 469), Psychedelic Mushrooms & MDMA (HF 248/249)

Other Recent Legislation

2018 Enacted

Comprehensive 13-Phase Opioid Response (HF 2377)

PMP auto-registration, required opioid-related use, proactive notices, near real-time reporting, reporting non-pharmacy transactions, first responder naloxone reporting, prescriber report cards, & surcharge; plus continuing education per CDC guidelines, penalties for inappropriate prescribing, electronic prescribing, banning new illicit drugs & Good Samaritan OD protections.

2017: Enacted in Iowa

- Controlled Substance Act Enhancement (SF 332)
- Prescription Drug "Take Back" Fees (SF 484)
- Drug Endangered Children Protections (HF 543)
- Synthetic Drug Controls (HF 296)
- Prescription Monitoring Program Medical Examiner Access (HF 523)
- Medical CBD Production & Distribution (HF 524)

2016: Enacted in Iowa

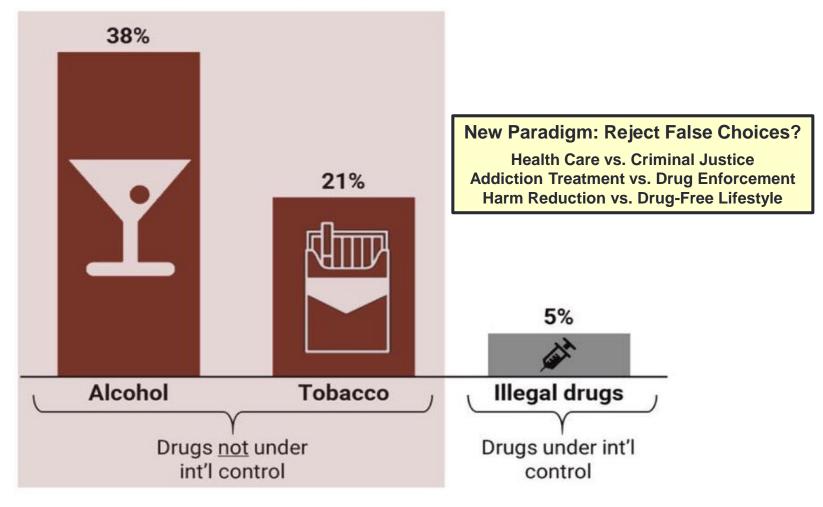
- Naloxone Access
- Prescription Monitoring Program Integration

Enacted Federally

- 2016: U.S. Comprehensive Addiction & Recovery Act (CARA)
- 2016, etc.: U.S. 21st Century Cures Act

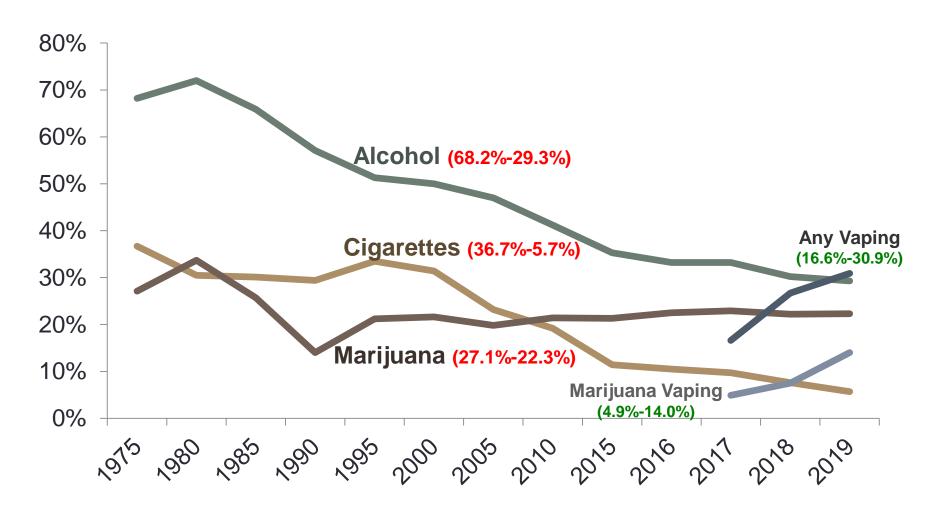
Do Drug Control Laws Work?

Percentage of people worldwide who used drugs in the past year (ages 15+)



Youth Substance Use 40+ Year Trends

Current Use (past 30 days) Among U.S. 12th Graders



Iowa News & Tools: Examples

Prevention, Intervention, Treatment & Enforcement

Prevention/Education

- "What You Don't See" mobile drug education exhibit powered by INOA.
- "Take Five" to talk with children (56% of youth say the main reason teens choose not to drink or use drugs is concern about disappointing or getting in trouble with their parents).
- Iowa Prescription Monitoring Program (PMP).

Intervention

- Good Samaritan training for law enforcement officers (IDPH).
- Expanded access to naloxone & use by first responders & other lowans.
- Opioid prescribing practices & patient education re: alternatives, etc.
- Diversion to treatment for low-risk persons with SUD disorders (pre/post-arrest).

Treatment/Recovery

- Expanded access to Medication Assisted Treatment in Iowa.
- Aftercare, peer recovery coaches, support groups & safe homes.

Enforcement+

- Drug Task Forces investigate traffickers/diverters, to curb black market supplies.
- Iowa Opioid/Drug Data Exchange (IODE).
- Investigations & litigation involving Rx opioid makers & distributors.

Get Help 24/7: Call 855-581-8111, Text 855-895-8398 or go to YourLifelowa.org

STAY SAFE!



Iowa Governor's Office of Drug Control Policy

Visit Our Website: https://odcp.iowa.gov